

## GARAGE CONSTRUCTION REQUIREMENTS

1. All garages require a footer/foundation assembly, the bottom of which must bear a minimum of three feet below the exterior grade, which is exposed to freezing. Footer/foundations may be all concrete of a minimum width of 12 inches or a combination of a poured concrete footer in conjunction with concrete block masonry. Footers used with cement block must be a minimum of 16 inches in width and 8 inches in depth or thickness. Garage foundations shall continue around all sides of the garage including the door side. Attached garages do not require a foundation wall on the indoor portion of wall. Concrete used for footers or foundations must be 2,500 psi. concrete. All footers must bear on solid, undisturbed virgin soil. Ground or rainwater must be removed from footer excavations prior to inspection and placing of concrete.
2. Garage floors shall be concrete with a minimum thickness of four inches and shall be placed on 4 inches of undisturbed earth or compacted granular fill. Reinforcement in the form of wire mesh or "fiber mesh" shall be placed or added prior to the pour. Dirt or gravel floors are not permitted. Floor drains are permitted but not recommended. Garage floors with no drain shall be sloped toward the door the minimum of 1 inch in ten feet. The elevation of the garage floor shall be a minimum of 4 inches lower than the floor level of an attached residence. Basement stairs located in the garage shall have a continuous 4-inch masonry or concrete curb completely surrounding the stairwell.
3. A curb four inches above finished floor grade, eight inches above the exterior grade and a minimum of four inches wide shall be constructed of either poured concrete or concrete block on which to place the wall assembly.
4. Anchor bolts (which secure the garage framing to the concrete or masonry curb) shall be placed 12 inches from each corner and a maximum of six feet apart. No section of wall, regardless of length, shall have less than two bolts.
5. Before anchoring the bottom plate, a 1/2-inch flex cell shall be applied to the curb top to assure a seal.
6. Garage framing studs shall be spaced 16 inches on center. Corners shall be constructed with double studs.
7. All openings shall have double studding (one full length stud and one stud which terminates under the header).
8. Headers over a sixteen-foot wide garage door *that are located in a bearing wall* shall be a minimum of two 2 X 12's bolted together with a 1/2 inch steel flitch plate in between. Similar headers located in non-bearing walls may utilize 1/2 inch plywood for the flitch plate.
9. Top plates shall be doubled and shall lap each other at corners to tie walls together.
10. Ceiling ties, sized according to the length of span, may be 2 X 6 or 2 X 8 nominal lumber. Maximum spacing of ceiling ties shall be four foot on center. Note that 2 X 4 lumber is **NOT** acceptable for ceiling ties.
11. Roof rafters shall be spaced 16 inches on center. Ceiling ties shall be spaced four foot on center. Roof trusses may be spaced 24 inches on center. Plywood or OSB board will require "H" clips when being applied to members spaced at 24 inches on center.
12. Roof sheathing shall be minimum one-half inch plywood or 7/16 inch oriented strand board (OSB board) and shall be an exterior grade type. "H" clips shall be used on all roof sheathing being applied to framing members spaced at 24 inches on center.
13. Roof covering may be asphalt shingles 240 pounds in weight and may be installed directly over sheathing lumber without the use of felt paper when roof pitch is 4/12 or greater.
14. Garages of all types shall be equipped with gutters and downspouts. If downspouts are not to connect into a storm sewer, runoff water must be maintained on owner's property (dry well).

## **CONSTRUCTION CONFORMANCE REQUIREMENTS FOR GARAGES**

**A garage building shall conform to all items below and all other applicable codes and City Ordinances.**

1. Before construction of a garage can commence, a building permit must be obtained from the Building Department. When applying for a permit, the contractor or property owner must bring a plot plan (sketched or architecturally rendered) specifying the property lines (width and length of lot), the size of house structure, the measurement from the rear of the house to the rear property line, and where the proposed garage is to be built. The plot must show the size of the new garage and show where the existing driveway is located.
2. If an old garage is to be torn down, a demolition permit is required.
3. Garages planned to be constructed must be within certain minimum dimensions from the rear and side property line. These minimum dimensions range from a minimum of three feet side line and six feet rear line.
4. No garage will be permitted to be built to a height greater than 15 feet above existing grade.
5. In addition to the above, a freestanding garage should be a minimum of ten feet from a dwelling. Garages that are closer than the ten-foot minimum to the dwelling must comply with the rules for attached garages. (See items 7, 8 & 9))
6. A garage can be no larger than a floor area of 500 square feet. An additional floor area of 200 square feet may be provided for each complete increment of 2,500 square feet of lot by which such lot exceeds 5,000 square feet. No garage can exceed 1,100 square feet regardless of lot size without Planning Commission Approval.
7. Garages planned to be attached to the dwelling must have a fire separation between the garage and the dwelling. The fire separation must extend all the way to the roof sheathing. The common wall (and ceiling of applicable) must be dry walled with 5/8 fire-resistant drywall on both sides of the wall
8. Every garage must have at least one 36-inch wide man-door leading either directly outside or into the dwelling unit. If a door is to be constructed between the living unit and the garage, it must be a metal-clad, fire rated door and equipped with a self-closing device. Windows in a garage are optional.
9. The floor level of an attached garage must be a minimum of 4-inches lower than the floor level of the house. If there is a stairway from the garage down to a basement area, the stairwell must have a 4-inch curb surrounding it.
10. Floor drains in a garage are permitted but not encouraged. Floor drains must be equipped with a trap and must be piped into the sanitary sewer. A plumbing permit is required for the installation of a floor drain. In lieu of a floor drain it is recommended that the floor be graded toward the overhead door approximately 1-inch per 10 feet of depth of the garage.
11. Electrical installations in a garage require an electrical permit. Garage wall outlets must be GFCI equipped. Non-metallic sheathed cable (ROMEX) is not permitted to be installed exposed in the wall. Metal conduit or metallic sheathed cable is required if the walls are not covered with drywall or plywood.